

What is claimed is:

1. A seal assembly comprising an annular bearing comprising a first end and a second end and a large longitudinal central aperture, wherein said first end comprises a counterbore formed in a wall surface of the bearing, said counterbore having an axially inner surface and a radially outer surface; and,

5 wherein a seal is disposed within said counterbore and contacts at least one of said axially inner surface or said radially outer surface of the counterbore.

2. The seal assembly of claim 1, wherein said bearing is a filament-wound bearing.

3. The seal assembly of claim 1, wherein an additional counterbore is formed in said 10 second end of the bearing, and further comprises a second seal.

4. The seal assembly of claim 1, wherein said bearing is formed of one-piece construction.

5. The seal assembly of claim 1, wherein said bearing is formed of two-piece construction.

15 6. The seal assembly of claim 5, wherein said two-piece construction comprises an outer cylinder of a predetermined inner diameter and an inner cylinder of a predetermined outer diameter which is equal to or less than the inner diameter of the outer cylinder.

7. The seal assembly of claim 6, wherein said outer cylinder comprises steel.

8. The seal assembly of claim 6, wherein said cylinder of smaller diameter comprises 20 a bearing material.

9. The seal assembly of claim 1, wherein said seal comprises a body portion and an radially inward extending portion forming a sealing lip.

10. The seal assembly of claim 1, wherein said axially inward extending portion is flexible relative to said body portion.

25 11. The seal assembly of claim 10, wherein said seal further comprises a void positioned between said body portion and said axially inward extending portion.

12. The seal assembly of claim 10, wherein said seal further comprises a rigid insert formed into the body portion of said seal.

30 13. The seal assembly of claim 12, wherein said rigid insert comprises an annular insert with an "L" shaped cross section, wherein one leg of the insert extends in an axial direction along the axial surface of the seal, and the other leg of the insert extends into the body portion of the seal.

14. The seal assembly of claim 1, wherein said bearing comprises filament wound glass-backed high strength PTFE fiber.

15. The seal assembly of claim 1, wherein said seal comprises thermoplastic polyurethane.

5 16. The seal assembly of claim 1, wherein said seal is affixed in said counterbore with an adhesive.

10 17. A seal assembly comprising an annular bearing comprising a filament wound bearing having a first end and a second end and a large longitudinal central aperture, wherein said first and second ends comprise a counterbore formed in an interior wall surface of the bearing, said counterbores begin defined by an axially inner surface and a radially outer surface;

wherein a seal is disposed within each of said counterbores and contacts at least one of said axially inner surface or said radially outer surface of the counterbore, said seal comprising a body portion and an radially inward extending sealing lip.